

AUTHOR INDEX

- Abe, M., 285
Albersheim, P., 45
Al-Kaisey, M. T., 147
- Bertoft, E., 269
Bhat, K. M., 293
Biely, P., 19
Blakeney, A. B., 365
Brown, J. A., 195
Brownlee, R. T. C., 365
Buleon, A., 351
- Catley, B. J., 195
Colonna, P., 73
Cooke, D., 103
- Darvill, A. G., 45
- Fiala-Beer, E., 1
Finch, P., c1
Fox, J. D., 163
- Geddes, R., 339
Gidley, M. J., 103, 121
- Harris, P. J., 365
Hisamatsu, M., 45
Hizukuri, S., 113, 183
Huber, A., 171
- Jackson, G. E., 371
Jacques, V. L., 1
Jeyarathan, P., 339
- Kainuma, K., 385
Kato, Y., 315
Kubota, M., 285
- Li, L., 227
Lomako, J., 331
Lomako, W. M., 331
Lynn, A., 379
- MacGregor, A. W., 301
MacGregor, E. A., 301
Manelius, R., 269
Marchetti, N. T., 215
Maruta, N., 113
Matheson, N. K., 85
McCleary, B. V., 257
Monma, M., 385
Morgan, J. E., 301
- Nevins, D. J., 315
Noel, T. R., 203
- Ohnishi, M., 285
Ota, U., 285
- Pazur, J. H., 215
Perez, S., 351
Praznik, W., 171
Preiss, J., 227
Prentice, R. D. M., 121
- Raimbaud, E., 351
Rammesmayr, G., 171
Rani, M. R. S., 183
Ring, S. G., 203
Robyt, J. F., 163
Roger, P., 73
- Sadek, M., 365
Sebesta, D. W., c1
Seib, P. A., 131
Shi, Y-C., 131
Shibanuma, K., 183
Sierks, M. R., 29
Sivak, M. N., 241
Slodki, M. E., 1
Spies, T., 171
Stark, J. R., 121, 379
Stephen, A. M., 371
Stone, B. A., 365
Sturgeon, R. J., 375
Svensson, B., 29
- Takeda, Y., 113
Taylor, J. A., 339
Tonomura, B., 285
- Vogt, D. C., 371
Vršanská, M., 19
- Walker, G. J., 1
Webster, J., 365
Whelan, W. J., 331
Wilkie, K. C. B., 147
Wood, T. M., 293
- York, W. S., 45
Yun, S-H., 85



SUBJECT INDEX

- Acarviosine (the pseudo-disaccharide moiety of acarbose) and other inhibitors of α -amylases, molecular modelling of, 351
- Action patterns of amylolytic enzymes as determined by the $[1-^{14}\text{C}]$ malto-oligosaccharide mapping method, 215
- ADPglucose pyrophosphorylase from a starch-deficient mutant of *Arabidopsis thaliana* (L.), characterization of, 227
- Alditol acetates, the detection and quantification of apiose by capillary gas chromatography of its, 365
- Amylase from *Chalara paradoxa*, heterogeneity of the glucoamylase components of the raw-starch-degesting, 385
- Amylase, iso-, substrate specificity of, 331
- Amylase of *Pseudomonas stutzeri* as a probe of the structure of amylopectin, c1
- Amylases, the action on linear maltodextrins of germinated barley α -, 301
- Amylolytic enzymes, action patterns determined by the $[1-^{14}\text{C}]$ malto-oligosaccharide mapping method, 215
- Amylose and amylopectin fractions of starches from maize genotypes, structural changes during development, 85
- Amylose, examination of the structure by tritium labelling of the reducing terminal, 113
- Amylose, the influence of chain length on the hydrodynamic behaviour of, 73
- Apiose, detection and quantification by capillary gas chromatography of its alditol acetates, 365
- Apo-glycogenin, preparation of, 331
- Arabidopsis thaliana* (L.), characterization of ADPglucose pyrophosphorylase from a starch-deficient mutant of, 227
- Arabinose, conformation of 3-O- β -D-galactopyranosyl-L-, and a comparison with its α -linked isomer, 371
- Arabinoxylan-rhamnogalacturonan complex from cell walls of *Zea* shoots, structural characterization of an, 315
- Aromatic side chains, role in the binding of substrates, inhibitors, and cyclomalto-oligosaccharides to the glucoamylase from *Aspergillus niger*, 29
- Barley α -amylases, the action on linear maltodextrins of germinated, 301
- Barley-starch granules, granule residues and "ghosts" remaining after heating in water, 121
- Binding of substrates, inhibitors, and cyclomalto-oligosaccharides to the glucoamylase from *Aspergillus niger*, roles of the aromatic side chains in the, 29
- Borohydride reduction of carbohydrates, a re-investigation, 375
- Branched starch polysaccharides, characterisation of Q-enzyme (starch-branching enzyme) by *in vitro* synthesis of, 171
- Candida albicans*, monitoring polysaccharide synthesis in, 195
- Carbohydrates, a re-investigation of the borohydride reduction of, 375
- Cellobiohydrolase I from *Trichoderma reesei* QM 9414, action on cello-oligosaccharides, 19
- Cellulase of the anaerobic bacterium *Clostridium thermocellum*, isolation, dissociation, and reassociation of the cellulosome, 293
- Cereal flours, measurement of the content of limit-dextrinase in, 257
- Clostridium thermocellum*, isolation, dissociation, and reassociation of the cellulosome of the cellulase system of, 293
- Conformation of 3-O- β -D-galactopyranosyl-L-arabinose and a comparison with its α -linked isomer, 371
- Crystalline and molecular order during starch gelatinisation, loss of, and origin of the enthalpic transition, 103
- Cyclomaltohexaose and soluble starch, effect of modification of the tryptophan residues of cyclodextrin glucanotransferase on the enzyme-catalysed hydrolysis of, 285
- Dextrinase, measurement of the content in cereal flours of limit-, 257
- Enzyme-catalysed hydrolysis of soluble starch and cyclomaltohexaose, effect of modification of the tryptophan residues of cyclodextrin glucanotransferase on the, 285
- Enzymic hydrolysis of starch granules, a method for the study of the, 269
- Fine structure of oyster glycogen, 183
- 3-O-D-Galactopyranosyl-L-arabinose, conformational comparison with its α -linked isomer, 371
- Gas chromatography of alditol acetates, the detection and quantification of apiose by capillary, 365
- Gelatinisation of starch, loss of crystalline and molecular order, and origin of the enthalpic transition, 103
- Gelatinization and retrogradation, the structure of four waxy starches related to, 131

- (1→4)- α -D-Glucan synthesis by a chloroplastic phosphorylase isolated from spinach leaves is independent of added primer, 241
- α -D-Glucans, synthesis by *Streptococcus cricetus* AHT, influence of the culture medium, 1
- Glucoamylase components of the raw-starch-digesting amylase from *Chalara paradoxa*, heterogeneity of the, 385
- Glucoamylase from *Aspergillus niger*, roles of the aromatic side chains in the binding of substrates, inhibitors, and cyclomalto-oligosaccharides to the, 29
- Glycogen, molecular and metabolic aspects of lysosomal, 339
- Glycogen, the fine structure of oyster, 183
- Glycogenin, apo-, preparation of, 331
- Granule residues and "ghosts" remaining after heating A-type barley-starch granules in water, 121
- Heat capacity of starch/water mixtures, a study of the, 203
- Hydrodynamic behaviour of amylose, the influence of chain length on the, 73
- Hydrolysis of starch granules, a method for the study of the enzymic, 269
- Hydrolysis of starch with hydrochloric acid in various alcohols, the formation of new kinds of limit dextrins by, 163
- Influence of chain length on the hydrodynamic behaviour of amylose, 73
- Inhibitors of α -amylases, molecular modelling of acarviosine (the pseudo-disaccharide moiety of acarbose) and other, 351
- Isoamylase, action on the surface of starch granules, 379
- Isoamylase, substrate specificity of, 331
- Limit dextrins, the formation of new kinds of, by hydrolysis of starch with hydrochloric acid in various alcohols, 163
- Limit-dextrinase in cereal flours, measurement of the content, 257
- Lupin seeds, the polysaccharides of agricultural, 147
- Lysosomal glycogen, molecular and metabolic aspects of, 339
- Maltodextrins, the action of germinated barley α -amylases on linear, 301
- Malto-oligosaccharide mapping method, determination of the action patterns of amylolytic enzymes by the [1- 14 C]-, 215
- Molecular and metabolic aspects of lysosomal glycogen, 339
- Molecular modelling of acarviosine, the pseudo-disaccharide moiety of acarbose, and other inhibitors of α -amylases, 351
- Monitoring polysaccharide synthesis in *Candida albicans*, 195
- Oligosaccharides, xyloglucan, containing from seventeen to twenty glycosyl residues, characterization of, 45
- Oyster glycogen, the fine structure of, 183
- Phosphorylase, (1→4)- α -D-glucan synthesis by a chloroplastic, isolated from spinach leaves is independent of added primer, 241
- Polysaccharide synthesis in *Candida albicans*, monitoring, 195
- Polysaccharides of agricultural lupin seeds, 147
- Pseudomonas stutzeri* amylase as a probe of the structure of amylopectin, c1
- Q-Enzyme (starch-branching enzyme), characterization by *in vitro* synthesis of branched starch polysaccharides, 171
- Reducing terminal of amylose, examination of structure by tritium labelling of the, 113
- Reduction of carbohydrates with borohydride, a re-investigation, 375
- Retrogradation and gelatinization, the structure of four waxy starches related to, 131
- Seeds of agricultural lupins, the polysaccharides of the, 147
- Starch-deficient mutant of *Arabidopsis thaliana* (L.), characterization of ADPglucose pyrophosphorylase from a, 227
- Starch-digesting amylase from *Chalara paradoxa*, heterogeneity of the glucoamylase components of the raw, 385
- Starches from maize genotypes, structural changes during development in the amylose and amylopectin fractions, 85
- Starches, the structure of four waxy, related to gelatinization and retrogradation, 131
- Starch gelatinisation, loss of crystalline and molecular order, and origin of the enthalpic transition, 103
- Starch granules, a method for the study of the enzymic hydrolysis of, 269
- Starch granules from barley, granule residues and "ghosts" remaining after heating in water, 121
- Starch granules, modification by hydrolysis with hydrochloric acid in various alcohols and the formation of new kinds of limit dextrins, 163
- Starch granules, the action of isoamylase on the surface of, 379
- Starch polysaccharides, characterisation of Q-enzyme (starch-branching enzyme) by *in vitro* synthesis of branched, 171
- Starch/water mixtures, a study of the heat capacity of, 203
- Streptococcus cricetus* AHT, influence of the culture medium on the synthesis of α -D-glucans by, 1
- Structural changes during development in the amylose and amylopectin fractions of starches from maize genotypes, 85

Structural characterization of an arabinoxylan-rhamnogalacturonan complex from cell walls of *Zea* shoots, 315

Study of the heat capacity of starch/water mixtures, 203

Surface of starch granules, the action of isoamylase on the, 379

Synthesis of α -D-glucans by *Streptococcus cricetus* AHT, influence of the culture medium on the, 1

Trichoderma reesei QM 9414, action on cello-oligosaccharides of cellobiohydrolase I from, 19

Tritium labelling of the reducing terminal of amylose, examination of structure by, 113

Tryptophan residues of cyclodextrin glucanotransferase, effect of modification on the enzyme-catalysed hydrolysis of soluble starch and cyclomaltohexaose, 285

Xyloglucan oligosaccharides containing from seventeen to twenty glycosyl residues, characterization of, 45

Zea shoots, structural characterization of an arabinoxylan-rhamnogalacturonan complex from cell walls of, 315

